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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. APPLICATION NO. **FILING DATE** CONFIRMATION NO. Douglas D. LeClear 10/648,575 08/26/2003 US20020143 4098 **EXAMINER** 7590 01/04/2006 173 WHIRLPOOL PATENTS COMPANY - MD 0750 TILL, TERRENCE R 500 RENAISSANCE DRIVE - SUITE 102 **ART UNIT** PAPER NUMBER ST. JOSEPH, MI 49085 1744

DATE MAILED: 01/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Office Action Summary	10/648,575	LECLEAR ET AL.	
	Examiner	Art Unit	
	Terrence R. Till	1744	
The MAILING DATE of this communication Period for Reply	appears on the cover sheet with	the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REL WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory per - Failure to reply within the set or extended period for reply will, by sta Any reply received by the Office later than three months after the may earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATED AT 1.136(a). In no event, however, may a reply find will apply and will expire SIX (6) MONTHS atute, cause the application to become ABANI	FION. be timely filed from the mailing date of this communic DONED (35 U.S.C. § 133).	
Status			
1) ☐ Responsive to communication(s) filed on 2a) ☐ This action is FINAL . 2b) ☑ T 3) ☐ Since this application is in condition for allocated in accordance with the practice under	his action is non-final. wance except for formal matters		ts is
Disposition of Claims			
4) ☐ Claim(s) is/are pending in the application 4a) Of the above claim(s) is/are without 5) ☐ Claim(s) is/are allowed. 6) ☒ Claim(s) 1-5,7-9,12-16 and 18-20 is/are rejected to Claim(s) 6,10,11 and 17 is/are objected to. 8) ☐ Claim(s) are subject to restriction and Application Papers 9) ☐ The specification is objected to by the Example 10) ☒ The drawing(s) filed on 26 August 2003 is/a	drawn from consideration. ected. d/or election requirement.	cted to by the Examiner.	
Applicant may not request that any objection to Replacement drawing sheet(s) including the cor 11) The oath or declaration is objected to by the	the drawing(s) be held in abeyance rection is required if the drawing(s)	. See 37 CFR 1.85(a). is objected to. See 37 CFR 1.1	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of: 1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the papplication from the International But * See the attached detailed Office action for a	ents have been received. ents have been received in Apportiority documents have been rereau (PCT Rule 17.2(a)).	lication No ceived in this National Stage	e
Attachment(s) 1) ☑ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB Paper No(s)/Mail Date 8/26/03.	Paper No(s)/N	mary (PTO-413) fail Date mal Patent Application (PTO-152)	

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the control electrically connected to the nozzle for controlling dispensing of the cleaning solution through the spray nozzle (claim 11) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 3. Claim 19 is rejected under 35 U.S.C. 102(b) as being anticipated by Cameron.
- 4. The patent to Cameron discloses a vacuum canister 30 fixedly mounted to the vehicle and configured to draw a vacuum in the canister; a hose 22 fluidly connected to the vacuum canister; a suction nozzle (see fig. 5) on the hose; a cleaning solution tank 16 for holding carpet and upholstery cleaning solution; a conduit 20 extending from the cleaning solution tank to a spray nozzle for dispensing cleaning solution from the cleaning solution tank; and a control (see column 5, lines 1-5. "actuate the nozzle head" is considered controlling the flow) on the suction nozzle to control operation of the vacuum and the spray nozzle.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

- 7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 8. Claims 1-3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over French patent to Laurent '474 in view of German patent to Schollmayer '025.
- 9. The patent to Laurent discloses (figs. 5-11) vacuum system for a vehicle comprising: a hose storage module 17 having a storage space and adapted to house a retractable vacuum hose 7 on a storage reel; a vacuum canister 18 fluidly connected to an end of the vacuum hose. Laurent does not disclose a vacuum console that has a pivotal and slidable cover in the shape of a vehicle seat. The German patent Schollmayer discloses a vacuum console 9 adapted to house a vacuum nozzle and having a pivotal and slidable cover (back of seat folded down- see figure 2) in the shape of a vehicle seat (the seat back). The hose storage module being positioned within the vehicle and configured to allow the retractable hose to reach any portion of the interior space of the vehicle. Schollmayer also discloses (see English abstract) that it is a battery operated cleaner. It would have been obvious to a person skilled in the art at the time the invention was made to provide Laurent with a console in view of the teaching of Schollmayer in order to be able to access the hose as well as hide it when not in use. Further, It would have been obvious to a person skilled in the art at the time the invention was made to provide Laurent with a battery in

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view of the teaching of Schollmayer so as to provide a power source for the vacuum motor. With respect to the recitation that it is a rechargeable deep draw battery, Schollmayer does not say what kind of battery it is. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a rechargeable deep draw battery, since it is considered to be within the general skill of a worker in the art to select a rechargeable battery on the basis of its suitability for the intended use as a matter of obvious engineering choice.

- 10. Claims 4 and 7-9, are rejected under 35 U.S.C. 103(a) as being unpatentable over French patent to Laurent '474, as modified by German patent to Schollmayer '025, as applied to claim 1 above, and further in view of Harrelson '058.
- 11. Laurent '474, as modified by Schollmayer '025, does not disclose the nozzle comprising a handle portion and a suction portion, the handle portion being configured with a first switch being electrically connected to a vacuum motor to operate the vacuum and a second switch being electrically connected to the hose storage module to operate a motorized extension and retraction of the hose. The patent to Harrelson discloses a vacuum system comprising: a hose storage module 17 adapted to house a retractable vacuum hose having a first end and a second end; a handle portion 38 and a suction portion 44, the handle portion being configured with a first switch 112 being electrically connected to a vacuum motor to operate the vacuum and a second switch 110 being electrically connected to the hose storage module to operate a motorized extension and retraction of the hose. The electrical connections are made by electrical wiring that runs along the hose and is connected to a wiring module. It would have been obvious to a person skilled in the art at the time the invention was made to provide Laurent, as modified by Schollmayer, a handle portion being configured with a first switch being electrically connected

to a vacuum motor to operate the vacuum and a second switch being electrically connected to the hose storage module in view of the teaching of Harrelson in order to automate the vacuum operation as well as eliminate any mechanical failure of spring-wound hose reel.

- 12. Claims 12, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over French patent to Laurent '474 in view of Harrelson '058.
- 13. Laurent discloses a vacuum system for a vehicle comprising: a hose storage module 17 having a storage space and adapted to house a retractable Vacuum hose on a Storage reel; and a vacuum canister 18 fluidly connected to an end of the vacuum hose. Laurent does not disclose one or more switches in electrical communication with the hose storage module and configured to extend and retract the hose into and out of the storage space. The patent to Harrelson discloses a vacuum system comprising: a hose storage module 17 adapted to house a retractable vacuum hose having a first end and a second end; a handle portion 38 and a suction portion 44, the handle portion being configured with one or more switches 110, 112 electrically connected (switch 110) to a hose storage module to operate a motorized extension and retraction of the hose. Harrelson additionally discloses the hose storage module comprises a hose retraction system having a roller 16 with a concave surface, the concave surface having a radius roughly the same as that of the vacuum hose and the roller has a plurality of projections 72,86 sized and spaced from each other to engage a corresponding plurality of adjacent valleys on at least one side of the vacuum hose. It would have been obvious to a person skilled in the art at the time the invention was made to provide Laurent a switch being electrically connected to a hose storage module to retract the hose into and out of the storage space in view of the teaching of Harrelson in order to eliminate any mechanical failure of spring-wound hose reel. Once modified, Laurent would have a roller

with a concave surface having a radius roughly the same as that of the vacuum hose and the roller has a plurality of projections sized and spaced from each other to engage a corresponding plurality of adjacent valleys on at least one side of the vacuum hose.

- 14. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over French patent to Laurent, as modified by Harrelson, as applied to claim 12 above, and further in view of German patent to Schollmayer.
- Laurent, as modified by Harrelson, does not disclose a vacuum console adapted to house 15. a vacuum nozzle attached the other end of the vacuum hose; the vacuum console comprising a pivotal and slidable cover in the shape of a vehicle seat. The German patent Schollmayer discloses a vacuum console 9 adapted to house a vacuum nozzle and having a pivotal and slidable cover (back of seat folded down- see figure 2) in the shape of a vehicle seat (the seat back). It would have been obvious to a person skilled in the art at the time the invention was made to provide Laurent, as modified by Harrelson, with a console in view of the teaching of Schollmayer in order to be able to access the hose as well as hide it when not in use. With respect to claim 14, Harrelson discloses a handle portion 38 and a suction portion 44, the handle portion being configured with a first switch 112 being electrically connected to a vacuum motor to operate the vacuum and a second switch 110 being electrically connected to the hose storage module to operate a motorized extension and retraction of the hose. As Harrelson has already been relied on to provide the switch for retracting the hose, it would be equally obvious to a person skilled in the art to provide a first switch being electrically connected to a vacuum motor to operate the vacuum and a second switch being electrically connected to the hose storage

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module in view of the teaching of Harrelson in order to automate the vacuum operation as well as eliminate any mechanical failure of spring-wound hose reel.

- 16. Claims 12, 15, 16, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cameron in view of Harrelson.
- The patent to Cameron discloses a vacuum system for a vehicle comprising: a hose 17. storage module 22 having a storage space (within the interior of the vehicle) and adapted to house a retractable vacuum hose on a storage reel (also 22); a vacuum canister 30 fluidly connected to an end of the vacuum hose, and further comprising a cleaning solution tank 16 and a conduit 20 extending from the cleaning solution tank to a spray nozzle for dispensing cleaning solution. Cameron does not disclose one or more switches in electrical communication with the hose storage module and configured to extend and retract the hose into and out of the storage space. The patent to Harrelson discloses a vacuum system comprising: a hose storage module 17 adapted to house a retractable vacuum hose having a first end and a second end; a handle portion 38 and a suction portion 44, the handle portion being configured with a first switch 112 being electrically connected to a vacuum motor to operate the vacuum and a second switch 110 being electrically connected to the hose storage module to operate a motorized extension and retraction of the hose. The electrical connections are made by electrical wiring that runs along the hose and is connected to a wiring module. Harrelson additionally discloses the hose storage module comprises a hose retraction system having a roller 16 with a concave surface, the concave surface having a radius roughly the same as that of the vacuum hose and the roller has a plurality of projections 72,86 sized and spaced from each other to engage a corresponding plurality of adjacent valleys on at least one side of the vacuum hose. It would have been obvious to a person

skilled in the art at the time the invention was made to provide Cameron with one or more switches being electrically connected to a hose storage module to retract the hose into and out of the storage space in view of the teaching of Harrelson in order to easily retract and extend the hose when needed. Once modified, Cameron would have a roller with a concave surface having a radius roughly the same as that of the vacuum hose and the roller has a plurality of projections sized and spaced from each other to engage a corresponding plurality of adjacent valleys on at least one side of the vacuum hose.

Allowable Subject Matter

Claims 6, 10, 11 and 17 are objected to as being dependent upon a rejected base claim, 18. but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's 19. disclosure. The patents to Brandstetter, Peterman, Hall and German patent to Sousa show the current state of the art in automotive vacuum cleaners, some of which having hose reels.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terrence R. Till whose telephone number is (571) 272-1280. The examiner can normally be reached on Mon. through Thurs. and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sun U. Kim can be reached on (571) 272-1142. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Terrence R. Till
Primary Examiner
Art Unit 1744

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